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IS 10769 (1984): Wheat Porridge [FAD 16: Foodgrains, Starches and Ready to Eat Foods]



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“Invent a New India Using Knowledge”



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
SPECIFICATION FOR
WHEAT PORRIDGE

UDC 664.641.125 POR



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

SPECIFICATION FOR WHEAT PORRIDGE

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Indian Standard

SPECIFICATION FOR WHEAT PORRIDGE

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 January 1984, after the draft finalized by the Food-grains and Foodgrain Industries Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 Wheat porridge is a common breakfast food in India. It is prepared by cooking with milk or water and adding sugar or milk to taste. It is also cooked with vegetables and consumed as savoury dish.

0.3 Wheat porridge is produced by gristing wheat in such a manner that a granular product, containing as little flour as possible is obtained. Most of this flour is removed by sifting.

0.4 In the formulation of this standard due consideration has been given to the *Prevention of Food Adulteration Act, 1954*, and Rules framed thereunder. Due consideration has also been given to the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*. However, this standard is subject to restriction imposed under these rules, wherever applicable.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for wheat porridge.

*Rules for rounding off numerical values (revised).

2. REQUIREMENTS

2.1 General — Wheat porridge shall be prepared from sound and properly cleaned wheat. It shall be prepared by gristing wheat in such a manner that a granular product containing as little flour as possible is obtained. Most of the flour shall be removed by sifting, but the flour so removed shall not exceed 10 percent of the whole wheat.

2.2 Description — Wheat porridge shall possess a good characteristic taste and odour and shall be free from rancid, musty, sour and other undesirable taste or odours. The porridge shall be free from living insects and moulds and shall also be free from dead insects, insect fragments and rodent contamination visible to the eye (corrected, if necessary for abnormal vision) with the aid of suitable magnification (not exceeding $\times 10$).

NOTE — The appearance, taste and odour shall be determined by sensory evaluation tests.

2.3 Particle Size — The material shall be retained on a 300- μm IS Sieve, and shall completely pass through 850- μm IS Sieve [see IS : 460 (Part 1)-1978*], when determined by the method given in Appendix A.

2.4 Wheat porridge, when properly cooked, shall show a good texture without excessive pastiness or stickiness and shall possess a palatable flavour, characteristic of good quality wheat, freshly gristed and cooked.

2.5 Wheat porridge shall also conform to the requirements as given in Table 1.

3. PACKING AND MARKING

3.1 Packaging — The packages may preferably be of 200 g, 500 g, 1 kg and thereafter in multiples of 500 g.

3.1.1 Unless otherwise agreed to between the purchaser and the vendor, quantities above 65 kg shall be packed in single, sound, A-twill or B-twill jute bags (see IS : 1943-1964† and IS : 2566-1965‡).

3.1.2 For quantities less than 65 kg, the material shall be packed in polyethylene or polyethylene lined jute bags or in bags of any suitable material as agreed to between the purchaser and the vendor.

3.1.3 The mouth of each bag shall be either machine-stitched or hand-stitched. If it is hand-stitched, the mouth shall be rolled over and then stitched. The stitches shall be in two cross-rows with at least 14 stitches in each row for jute bags of 65 kg and above.

*Specification for wire cloth test sieves (second revision).

†Specification for A-twill jute bags (revised).

‡Specification for B-twill jute bags (revised).

TABLE 1 REQUIREMENTS FOR WHEAT PORRIDGE

(Clause 2.5)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST REF TO	
			Appendix of IS : 1155-1968*	Other Standard
(1)	(2)	(3)	(4)	(5)
i)	Moisture, percent by mass, <i>Max</i>	9	A	—
ii)	Total ash (on dry basis), percent by mass, <i>Max</i>	2.25	B	—
iii)	Acid insoluble ash (on dry basis), percent by mass, <i>Max</i>	0.2	C	—
iv)	Protein (on dry basis), percent by mass, <i>Min</i>	8.0	—	IS : 7219-1973†
v)	Alcoholic acidity (as H_2SO_4), with 90 per- cent alcohol, percent by mass, <i>Max</i>	0.05	F	—
vi)	Crude fibre (on dry basis), percent by mass, <i>Max</i>	1.5	G	—

*Specification for wheat *ATTA* (*second revision*).

†Method for determination of protein in foods and feeds.

3.2 Marking — Each bag shall be suitably marked with the following particulars:

- Name of the material;
- Name and address of the manufacturer;
- Batch or code number;
- Net mass;
- Sieve size through which the material passes; and
- Any other details required under the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*.

3.2.1 The marking of the bags shall be done in such a manner that the dye or ink (*see* IS : 1234-1980*) used does not penetrate into the material.

*Specification for ink, stencil, oil base, for marking porous surfaces (*first revision*).

3.2.2 Each bag may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

4. SAMPLING

4.1 Representative samples of material for testing conformity to this standard shall be drawn according to the method prescribed in IS : 5315-1978*.

5. TESTS

5.1 Tests shall be carried out as prescribed in **2.2**, **2.3** and col 4 and 5 of Table 1.

5.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see* IS : 1070-1977†) shall be used in tests.

NOTE — ' Pure chemicals ' shall mean chemicals that do not contain impurities which affect the results of analysis.

A P P E N D I X A

(*Clause 2.3*)

DETERMINATION OF PARTICLE SIZE

A-1. PROCEDURE

A-1.1 Transfer about 10 g of the material to a 850- μ m IS Sieve [*see* IS : 460 (Part 1)-1978‡], and sieve for 2 minutes. Brush the upper surface of the sieve and sieve again for 1 minute.

If no residue is left, sieve the material passing through 850 μ m. IS Sieve using 300- μ m IS Sieve for 2 minutes.

A-1.2 The material shall be deemed to have satisfied the requirement of test if no residue is left on the 850- μ m IS Sieve and entire material is retained on the 300- μ m IS Sieve.

*Methods of sampling for milled cereals and pulses products (*first revision*).

†Specification for water for general laboratory use (*second revision*).

‡Specification for wire cloth test sieves (*second revision*).

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INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s ²
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemen	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²